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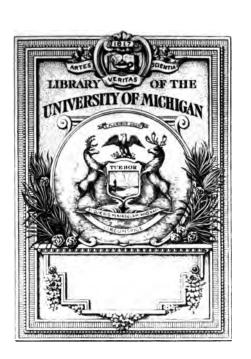
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THE STATE OF SÃO PAULO
(BRAZIL)

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DEPARTMENT OF AGRICULTURE, COMMERCE AND PUBLIC WORKS OF THE STATE OF SÃO PAULO (BRAZIL)

THE STATE OF SÃO PAULO

(BRAZIL)

Statistics and General Information

1903



SÃO PAULO

TYPOGRAPHIA BRAZIL DE CARLOS GERKE 47 — Rua de São Bento — 47 1904 F 2631 ,525 19**04**

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The State of São Paulo.

he State of São Paulo, one of the twenty states of the United States of Brazil, has an area of about 260,000 sq. Km. and a population estimated at 2,570,000 inhabitants.

Situated in the middle south of Brazil, the State of São

Paulo is cut, at about a third of its width from its southern boundry, by the tropic of Capricorn which passes through the municipality of the State Capital. Occupying only $^{1}/_{32}$ of the total area of the country, it contains nearly $^{1}/_{8}$ of the total population of the Republic.

The population of the State of São Paulo, besides its natural growth which has been very active, has been greatly increased by emmigration. The census of 1872 gives it a population of 837,354. In 1886 the population had reached 1,221,394. Following this proportion the population at the end of

the century should have been only about 1,800,000 inhabitants.

The capital of the State, the city of São Paulo, has to day 250,000 inhabitants. In 1807 its population was calculated at from between 15,000 and 20,000 inhabitants. In 1850 it had 30,000, in 1886 45,000 and in 1896 150,000 inhabitants.

Nevertheless, the State of São Paulo, according to the classification of the German census Bureau has only one large city (more than 100,000 inhabitants): its capital; two medium sized cities (between 20,000 and 100,000 inhabitants): Campinas and Santos; and fourteen small cities (more than 5,000 and less than 20,000 inhabitants), which follow in the alphabetical order: — Amparo, Araraquara, Franca, Guaretinguetá, Jahú, Jundiahy, Lorena, Pindamonhangaba, Piracicaba, Ribeirão Preto, Rio Claro, São Carlos do Pinhal, Sorocaba and Taubaté.

Emmigration, largely of rural labourers, has cotributed considerably to the rapid increase of the population of São Paulo. Between 1827 and 1902 the State recieved 1,075,654 emmigrants, of whom about 770,000 were Italians, 200,000 Spaniards and Portuguese and the others of various nationalites.

Civil government is administered through three departments: the legislative, the executive, and the judicial. The first is vested in the congress, com-

posed of the Senate and the House of Reputives. The executive power is vested in the



Viaduct on the Sierra ("São Paulo Railway" sident of the State. The judicial power is in judges and juries, the Supreme State Cour

the highest judicial power in the State, having the power to decide on appeals and demurers from the decisions of the inferior courts.

The administrative services of the State are distributed to three departments, each governed by a secretary, who is responsible directly to the President of the State. The Departments are: (1) that of the Interior and Justice: (2) that of Agriculture, Commerce, and Public Works, and (3) that of Finances.

Besides these there are the following Departments and Institutions:

Pertaining to the Department of the Interior and Justice: The Public Library, General Inspection of the Public Schools, Normal School, Complementary Schools, Model (Training) Schools, Kintergartens, "Group" Schools, Preliminary Schools, the Gymnasia of the State Capital and of Campinas, Polytechnic School, the Orphan and Insane Asylums, the Department of Statistics and the Archives, The Official Gazette, the Directory of the Health Department, the Pharmaceutical Labratory, the Bacteriological Institute, The Labratory of Chemical Analysis, the Vaccine Institute, the General Service of Disinfection, the Hospital for Contageous Diseases, the Demographo-sanitary Service, and the Serum-therapic Insti-This Department also controlls: the Supreme Court of the State, the office of Attorney General, the Circuit Judges, the Chamber of Commerce, the Department of the Police, the State Prisons, and the Department of Public Force and Supplies.

The Department of Agriculture, Commerce, and Public Works controlls: The Superintendency of Public Works, the Inspection of Railroads and Navigation, Emmigration and Colonization. The Agronomic Institute, the Practical School of Agriculture "Luiz de Queiroz", the Agronomic Service, the Geographical and Geological State Survey, the Botanical Experiment Station, the Meteorological Service, and the Water Supply of the State Capital and of various cities of the interior.

The Department of Finances has charge of the State Treasury and of the several stations for the collections of State revenues.

There are in the State also the following Establishments or Departments belonging to the Federal Government:

The Law School, the National Sub-treasury, the Department of Telegraphs, the Post Office Department, the Santos Custom House, the Captaincy of the Port of Santos, and the Commandery of the National Guard.

The revenue collection by the State Treasury, during the financial administration of 1902, was

\$20,572,984.70, at the par of exchange. This sum was collected under the following titles:

| Export duties on goods and | |
|---------------------------------|------------------------------|
| merchandise produced in the | • |
| State | \$13,642,626.00 |
| Dispatch taxes on goods and | |
| merchandise produced in the | |
| State | \$145,272.95 |
| Taxes on real estate transfers | \$1,956,832.45 |
| Inheritance taxes | \$ 543,933.1 4 |
| State revenue stamps | \$306,732.64 |
| Transportation taxes | \$1,152,527.39 |
| Taxes on real estate in the | |
| State capital | \$431,817.22 |
| Drainage tax for the State ca- | |
| pital | \$526,341.11 |
| Water tax for the State capital | \$670,841.33 |
| Matriculation tax for the Pu- | |
| blic Schools | \$13,213.96 |
| Sale of Public Lands | \$14,285.11 |
| Collection on the floating debt | \$ 131,155.23 |
| Additional tax | \$362,620.15 |
| Indemnisations | \$392,601.94 |
| Eventuals, including fines for | |
| the infraction of laws etc | \$200,410.92 |
| Revenue from State Establish- | |
| ments | \$81,773.16 |
| Total | \$20,572,984.70 |

The expenditure during the same year was \$22.366,664.70.



View on Rua 15 de Novembro (löth of Novembro Str (Capital of the State of São Paulo).

The deficit was covered by the reserve lated during previous administrations, leavi

lance in the treasury of \$4,769,609.11, which was carried over to the financial year of 1903.

The following items of the expenditure deserve especial mention:

| 1 1 1 | |
|-----------------------------------|------------------------|
| Public Instruction (all grades). | \$ 3,599,957.75 |
| Sanitary Service and Public Aid | \$1,214,718.22 |
| Judges Saleries | \$874,892.10 |
| Police Department | \$4,527,963.25 |
| Public Works (roads and bridges | |
| school and prison buildings, | |
| water supply and drainage). | \$3,484,455.68 |
| Colonization and Emmigration. | \$970,870.85 |
| Practical Schools of agriculture, | . , |
| experimental stations, agro- | |
| nomical posts, and the distri- | |
| bution of seeds | \$202,095.63 |
| Interest and Sinking Fund on | и / |
| the State Debt | \$2,069,330.86 |
| A | |

According to the balance sheet published by the Treasury, the floating debt of the State, arising from loans and advances to railways and municipalities, and other sources, was, on the 31st of December of 1902 \$169,319.43. The funded debt was \$9,778,561.62 being \$907,650.27 home and \$8,870,911.35 foreign.

Climate and Public Health

By virtue of its geographical position, the State of São Paulo should have a somewhat tropical cli-

mate, because it lies between the 20th and paralells of latitude, south, and therefore its & est extent is within the Tropic of Capricorn. ever the State is formed of a plateau with a inclination to the north-west and a mean alt of 600 meters above the level of the sea, with vations of more than 1000 meters in many p the latitude being thus compensated by the alti



Part of the State Capital near the station of "The São Paulo Railway".

the climate is singularly modified, presenting al characteristics of a warm temperate climate.

The State has a Meteorological Service, regulestablished, with modern registering instrument more than 40 stations scattered over its terrimany of them established for more than ten y. The data furnished by these stations give, then a fair idea of the climatic phases of the State

Taking as a base the observations made at of the most distant stations and at one central

tion, it is easily seen that they justify the above classification.

The principal factor is, without doubt, temperature. At the following stations, which represent the extremes, the following averages were observed during about ten years:

| | Tem | | | | |
|---------------|----------------|---------------------|---------------------|---------------------|---|
| C | Santos | São Paulo | Tatuhy | Bragança | Porto Ferreira |
| Summer Autumn | $25.0 \\ 23.1$ | $\frac{21.4}{18.7}$ | $\frac{22.7}{19.3}$ | $\frac{22.2}{20.1}$ | $\begin{array}{c} 25.4 \\ 22.1 \end{array}$ |
| Winter | 18.8 | 14.7 | 15.3 | 16.0 | 17.6 |
| Spring | 20.6 | 18.0 | 19.2 | 19.3 | 21.9 |
| Yearly | 21.9 | 18.2 | 19.1 | 19.4 | 21.7 |
| | A | bsolute 1 | Iaximur | ns | |
| | 40.0 | 38.5 | 42.5 | 36.5 | 35.0 |
| | _ | Absolute [| Minumii | ns | |
| | +3.0 | | | | |

The months of the four seasons are as follows.

December March June September October

February May April May November

From these temperatures it may be easily seen that nearly all kinds of cultivation may be undertaken in the State of São Paulo, and that, contrary to what has been reported, the climate is very favorable to health.

This mildness of climate is further increased by

the difference of temperature between the night and day, called in meteorology "oscillations of temperature". At the aforesaid stations the following — averages of these oscillations have been observed:

Santos São Paulo Tatuhy Bragança Porto Ferreira 8.6 9.6 12.3 11.1 10.2



Station of the "São Paulo Railway" (State Capital).

From which we may deduce that the nights are cool and agreeable even during the summer months, which does not occur in the truly tropical climates where the oscillations are never more than 3 or 4 degrees.

The second factor, of great importance, is the rainfall. In this respect the State is especially favoured, because the rains, besides being very regular

are very evenly distributed, the want of water never being felt. This means that a general drouth need never be feared. To add to this, the State has a hydrographical system which guarantees the favorable outcome of any agricultural enterprise, large or small.

At the stations taken as examples, the distribution of the rainfall is as follows, expressed in millimeters:

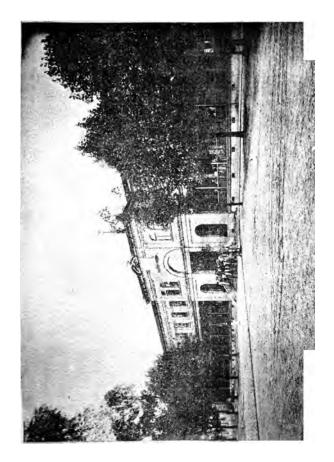
| | Santos | São Paulo | Tatuhy | Bragança | P. Ferreira |
|--------|--------|------------|--------|----------|-------------|
| Summer | 851 | 569 | 587 | 647 | 616 |
| Autumn | 636 | 290 | 292 | 305 | 258 |
| Winter | 402 | 139 | 154 | 115 | 57 |
| Spring | 442 | 317 | 346 | 389 | 307 |
| Yearly | 2,331 | 1,315 | 1,379 | 1.456 | 1,238 |

During the winter months, when, some times, the rains fall at greater intervals, they are Providentially substituted by the dews which fall in great abundance, so that the vegitation does not feel the absence of the rains.

In consequence of this phenomenon, the average percentage of moisture is very large.

The direction of the winds in the State is very regular, and is composed of two principal winds: NW and SE. Of these two the second has the largest percentage of frequency. Both are high winds and when they drop nearer the surface of the earth they follow the local topography, but it is always easily perceived that they belong to the two principal winds.

They rarely blow at cyclone speed and t



nately these phenomina have never been note the State with that degree of violence which

attain in other parts of the globe. The same may be said of hailstorms, which are very rare.

The only meteorological phenomenon, in any way disastrous, and it only as regards the coffee culture, has been frost. Being restricted to certain limits of altitude, and, in many cases, due to felling the trees which served as a barrier, the damage has been relatively insignificant and might easily have been avoided. On the other hand the frost serves to demonstrate that the climate of the State is far superior to what it has been reported, as it is impossible to classify as tropical the climate of a country where frosts occur.

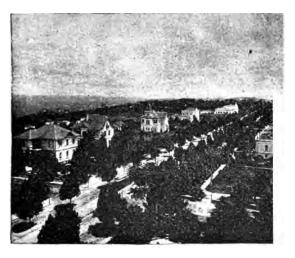
To resume, the climate of the State of São Paulo is warm and temperate, and, in many places, may not even be classified as warm, and in which all of European plants would prosper. Its insalubrity is a myth, to-day entirely disproved by the registering instruments of the Meteorological Department, which admit of no mistake or doubt.

Public Health

Confirming the climatic data, statistics demonstrate very favorable condition of health in the State of São Paulo.

Owing to purely accidental causes, in years past it has been visited by epidemics of yellow fever.

Santos, a seaport through which all direct trade passes, daily visited by ships with crews more subject to the disease than the was, while unprovided with the sanitary i ments which it enjoys to-day, the focus fror yellow fever spread to some points of the



Avenida Paulista (Capital).

This irradiation was greatly favored by the ordinary increase in foreign population, due migration, in certain localities of the State had not time to prepare themselves with the penable sanitary improvements.

Campinas, Araraquara, Limeira, Rio Cla had epidemics of yellow fever only so long were not furnishes with regular systems of water supply, sewers, and drainage. The State capital, notwithstanding its dense population, principally of foreigners, having been able to provide these systems, never had an epidemic of yellow fever; al-



A part of Largo do Thesouro (Treasury square) (State Capital).

though situated between Santos and the cities above mentioned.

It is now some years since the disease has appeared in an epidemic form. The focus being destroyed, and with the sanitary improvements already carried out in the principal cities of the interior,

the serious outbreaks which occurred many years ago have disappeared.

The other epidemic diseases, such as typhoid fever, smallpox, etc., never attained that serious phase, in the State of São Paulo, which they have



A part of the Largo do Rosario (Rosary Square) (State Capital).

reached in other countries. Even tuberculosis claims fewer victims in São Paulo. In the Capital the mortality from tuberculosis is only about 7 for each 100 deaths, while in some European capitals the proportion is as high as 25 and 50 persons for each 100 deaths.

Finally, to show clearly the excellent health condition of the State of São Paulo, it is sufficient to examine the following data indicating the yearly deaths per 1000 inhabitants in some cities in the State and some foreign cities.

| ıe | and so | | | ıgıı | . Ci | . CI C | ٥. | | | | arly deaths |
|-----|------------------|-----------------|-----------|-----------|------|--------|----|--|-----|------|-------------------------------|
| | Foreign | ı citie | es | | | | | | per | . 10 | 00 inhabitants |
| | Madrid | | | | | | | | | | 36.4 |
| | Lisbon | | | | | | | | | | 34.8 |
| | Marseil | lle . | | | | | | | | | 30.6 |
| | Milan . | | | | | | | | | | 24.6 |
| | Paris . | | | | | | | | | | 21.3 |
| | Rome . | | | | | | | | | | 20.6 |
| | Buenos | s Ay | res | | | | | | | | 22.5 |
| | Stat | Cities te of | of São | the Pa | ulo | | | | peı | Ye: | arly deaths 00 inhabitants |
| | São Pa | ulo | (Sta | ıte | caj | pita | l) | | | | 18.14 |
| | Campin | nas | | | | | | | | | 24.49 |
| | Ribeirā | io Pi | reto | | | | | | | | 16.50 |
| | São Ca | ırlos | do | Pi | nha | ıl | | | | | 14.52 |
| | Araraq | uara | | | | | | | | | 10.56 |
| | Itapira | | | | | | | | | | 19.44 |
| | Jahú . | | | | | | | | | | 21.23 |
| | Cajurú | | | | | | | | | | 13.76 |
| | Mocóca | a. | | | | •. | | | | | 13.57 |
| | Bragan | ıça. | | | | | | | | | 21.78 |
| | Espirit | o Sa | nto | do | P | inh | al | | | | 22.86 |
| | \mathbf{Belem} | do : | Des | cal | vad | 0 | | | | | 20.08 |
| | | | | | | | | | | | other cities |
| , . | 4 | | | | | | | | | | |

Excepting the State capital, all the other cities mentioned above are centers of coffee culture where the foreign emigrants gather.

Public Instruction Libraries and Museums — Private Instruction

ublic instruction, in the State of São Paulo, has always been the object of zealous solicitude on the part of the government, but it was only after 1890 that it had its greatest and best development.

A DESCE DE

Primary instruction in the State of São Paulo is regulated chiefly by the decrees of November 27th., 1893 and January 11th., 1898, and consists of two departments, *Preliminary* and *Complementary*; the former being for children of from 7 to 14 years of age, the latter for all those who finish the preliminary course. At the end of this course a diploma is given which entitles the owner to teach in the preliminary schools (primary schools).

The following is the plan of organization of the public schools of the State.

In every locality where from 20 to 40 children,

of school age are to be found, a preliminary school shall be established, as many being opened as may be needed to accommodate all pupils, at the rate of 40 to each school.

In all places where a probable attendance of



Flora of São Paulo

30 adults can be obtained, a free night school shall be opened.

There are at present in the State 3,320 preliminary schools, for both sexes, 1,852 being for boys, 1,348 for girls and 120 for both sexes. Of these 2.504 under the State and 816 are maintained by the respective municipalities. There

are also 72 night schools. The total enrollment is 37,960.

There is in the State a type of preliminary school called, "Model Schools" with a five years course, organised especially as practice schools (training schools) for the pupils of the Normal School.

There are in the State five Model Scl the capital and one at Itapetininga, enrollment of 2,292 pupils.

At the county-seats where there are preliminary schools, these may be uni

"Group" in which the graded system of the "Model Schools" may be introduced, dividing the pupils into vears after the plan of the "Model Schools". There are 58 of these "Groups" in the State, eight being in the capiital and fifty in the interior, with an enrollment of 39,110 pupils.

In the capital of the State, there



Flora of São

is a kindergarten, devoted to the teachildren by the Froebel system, who from 180 to 200 pupils of from 4 to 6

There is also at the capital of the ing school for girls, supported by the ment, called the "Seminario de Educa

support and education of unprotected orphans, where 100 orphans recieve instruction in primary branches, in housework and domestic science.

The State also maintains at the capital a correctional school known as the "Instituto Disciplinar" for idle, vicious, and abandoned minors. Here these boys receive training which gives them habits of industry: here also they are educated, taught primary branches and learn trades.

Complementary schools

(Primary Normal course)

The course in these schools is of four years, for both sexes, but taught in seperate classes, each class having a different teacher.

There are six Complementary Schools, two being at the capital and one at each of the following cities; Itapetininga, Piracicaba, Campinas, and Guatatinguetá, the last two having been opened during this year.

The total enrollment of pupils in the Complementary Schools is 1,251.

The Normal School

(Secondary Normal course)

The Normal School is located at the capital of the State and is an institution of strictly secondary and professional education, having for its object the preparation of professional teachers, giving its stu-



Mango trees

dents the required intellectual and moral training, as well as the practice needed for the performance of their duties as teachers.

The normal course is of four years, free to both sexes, but in seperate classes. The enrollment this year was of 286 students of both sexes.

Secondary Education

The official institutions of secondary education in the State of São Paulo, are, — the Gymnasium of the City of São Paulo, and the gymnasium at Campinas. These institutions aim at giving a complete fundamental, secondary education, such as will fit the student for professional studies.

The course of the gymnasia is of six years.

The Gymnasium of the city of São Paulo has 145 students and that of Campinas, 105.

Higher Education

There are in the State two institutions of higher educations. — a Law School, under the Federal government, and a Polytechnic School supported by the State.

The law school was created by a law enacted Aug. 11, 1827. The course is of five years. There are at present 444 students in attendance.

Connected with the Law School is a fine library which is open to the general public. The Faculty publishes an annual review containing important discussions and valuable articles.

The Polytechnic School was opened Feb. 15th., 1894.

There are two courses in what is considered fundamental knowledge, and nine courses in special subjects. The total enrollment in the several courses is of 169.



Date Palm

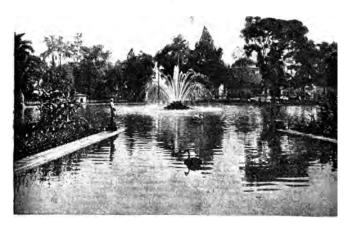
Professional Agricultural Education

The first school of this kind, created by a decree of 1900, as a "School of Practical Agriculture" was established on the estate of S. João da Montanha, near Piracicaba. It is now known as the "Luiz de Queiroz School of Practical Agriculture" in honor

of and as a tribute to the memory of the late honored citizen Luiz Vicente de Sousa Queiroz, who donated the estate to the government, with all its valuable improvements.

The course of studies is of three years and is distributed to 5 departments.

Another institution of agriculture was opened



Fountain in the public garden (State Capital).

this year in Iguape, known as the "Dr. Bernardino de Campos school of Agricultural Apprenticeship," Its general purpose is the same as that of the "Luiz de Queiroz school" but of narrower scope, having a 2 years course. There are at present 22 regular students and 7 who attend lectures only.

There are two Agricultural Schools, similar to that of Iguape, — one at Batataes, called "The Agri-

cultural School of Batataes" and the other ras, called "The Rural School of Araras," s by their respective municipalities. In othe cipalities plans are being made for similar

School Statistics

In order that the reader may see at the number of schools supported by the St the number of pupils attending them, the f tables have been organised.



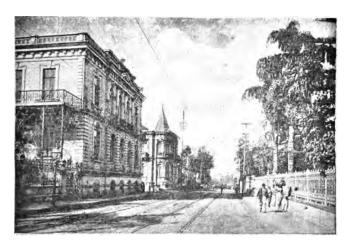
Wild fig tree.

| DESIGNATION | NU | NUMBER OF SCHOOLS | F SCHO |)OLS | NUMB | NUMBER OF PUPILS | UPILS |
|---|----------|-------------------|--------|-------|--|------------------|--------------|
| | Wale | Female | Mixed | Total | Wale | Female | Total |
| Schools of the preliminary grade | | | | | | | |
| State Schools | 1,446 | 938 | 120 | 2,504 | 15,906 | 13,774 | 29,680 |
| Municipal Schools | 406 | 410 | | 816 | 2,967 | 3,153 | 6,120 |
| Night Schools | 75 | | | 15 | 2,160 | | 2,160 |
| Kintergartens | | | | | S3 | 98 | 181 |
| Groups | 30 | 13 | 03 | 35 | 18,982 | 20,128 | 39,110 |
| Model Schools . | | | 0 | 01 | 1,098 | 1,194 | 2,292 |
| Orphan Seminary | | 1 | | 1 | | 100 | 100 |
| Correctional School | _ | | | 1 | 335 | | 35 |
| Normal grade Complimentary Schools (Primary | | | | | | | |
| Normal School (Secondary Course) | | | -6 | -6 | 512 100 | 739 186 | 1.251 286 |
| Secondary Schools | | | | | | | |
| Gymnasia | 10 | | | 10 | 250 | | 250 |
| Higher Education | | | | | | | |
| Law School | _ | | | - | 444 | | 444 |
| Polytechnic School | <u>.</u> | | | | 169 | | 169 |
| Agricultural Schools | | | | | | | |
| Agricultural School of Piracicaba Agricultural School of Iguape | 11 | | | | 33 29 | | 33 29 |
| | 1,934 | 1,351 | 186 | 3,471 | 1,351 186 3,471 42,768 39,372 82,140 | 39,372 | 82,140 |

Libraries and Museums

Two establishments intimately connected with education, supported by the State are the Public Library and the State Museum.

The Public Library has among its collections



Florencio de Abreu Street

some valuable bibliographic rarities upon history, science, literature, philosophy, etc. as well as a great mass of newspapers and periodicals, both domestic and foreign, amounting to nearly 25,000 volumes.

The State Museum, besides the collections of the three kingdoms of nature, has rich ethnological, archeological, and numismatic collections, also collec-

tions of historical objects, works of art, Brazilian paintings, etc.

The number of visitors may be estimated at 30,000 yearly.



São Bento Street (Capital)

There are in the state several libraries and reading rooms, belonging to individuals and private corporations.

There are also several valuable private museums in the State.

Private Institutions

Besides the educational institutions supported by public funds, there are many primary and



São Bento Square (Capital)

secondary schools belonging to individuals and associations, brotherhoods and religeous orders, some of which receive State aid. The profession of teaching is free to natives and foreigners alike. From re-

ports recieved it is found that there are in the State about 800 private day schools for both sexes, including night schools, with an average of 24,000 pupils, and there are about 150 boarding schools for both sexes. There are also private institutions for higher education, professional and technical.

Some of these private establishments are of im-



Palace of the State Government

portance, such as, for example: The Episcopal Seminary, The American School and Mackenzie College, The Free School of Pharmacy, The Practical School of Commerce, The Lyceums of Arts and Trades, The D. Anna Rosa Institute, The D. Carolina Tamandaré School, and The "Heart of Jesus" Lyceum.

Among private schools of primary and secondary education, the following are worthy of mention: The Institute of Science and Letters, The Model English School, Hydycrofh College, The Gymnasium of S. Bento, The Nogueira da Gama School at Jacarehy, The Jahú Atheneum, at Jahú, The School of



Palace Garden (Capital)

S. Luiz, at Itú, The Maternal Schools, The Masonic Day and Night Schools, The St. Joseph Day School, and the People's School at S. Vicente. We gather from reports and various data that the enrollment in these private institutions may be safely put down at 45,000.

Relating to physical culture: greater attention is

being paid to this branch every year, several athletic games having been introduced for promoting health and physical development.

There are in the State a great number of literary and scientific associations. The most important are; The Historical and Geographical Institute,



Public Gardens (Capital)

The Society of Ethnography and Civilisation of the Indians, The Scientific Society of São Paulo, and The Center of Science Letters and Arts of Campinas.

Agriculture

griculture is the principal source of wealth in the State of São Paulo, and the field of activity of the majority of its inhabitants.

Among the different plants cultivated, coffee holds the first place;

after it comes sugar-cane, cotton, grapes, tobacco, and several kinds of cereals, principally rice, corn, and beans.

It was only after 1825 that coffee culture reached any degree of importance. It was then introduced in this very fertile district, where it found conditions more favorable to its reproduction than are to be found in any other part of the world.

To obtain a fair estimate of the increase in the coffee production it is sufficient to consider that, in 1825, the exportation of coffee from the port of Santos was two million kilos; in 1867 it reached thirty million and twenty years afterwards, in 1887,

it had attained five times that amount, or one hundred and fifty million kilos.

The entrance of coffee in the Santos market during the harvest of 1901-1902 was above 10,000,000



Private Residence (Capital)

£:

bags of 60 kilos each. The production of coffee in the State of São Paulo was, that agricultural year, more than half the total output of the whole world.

The statistics on coffee culture collected by the Department of Agriculture in 1901, show that this

cultivation is widely spread over the State. There were at that time 15,828 plantations on which coffee was grown. The number of mature trees, — that



Private Residence (Capital)

is, coffee-bearing trees, — was 525, 624, 435 and that of young trees, under four years, 134,335,625.

The territorial area occupied by those 15,828 plantations was 4,217,802 hectares. Of this, 751,115

hectares was occupied by the existing trees and 981,037 hectares reserved for planting new trees.

There was, therefore, within that part of the State already settled and provided with modern means of transportation, sufficient coffee land in 1901 to double the output of the State; in other words, the State



Public School (Capital)

of São Paulo could easily supply all the coffee consumed in the whole world.

Coffee plantations are found at a distance of 606 kilometros from the port of Santos.

Coffee is almost the only agricultural produce exported from the State of São Paulo. The others either do not suffice for home consumption, or barely supply the home demand.

The cultivation of sugar cane is the second in importance in the State, principally for the distilling of "aguardente" (cane whiskey).

According to the census of 1900 the total production, in 100 municipalities out of the 172 into which the State is divided, was of 92,517,000 liters of whiskey and 7,389,525 kilos of sugar. In the same year it was necessary to import sufficient of



Polytechnic Institute (Capital)

these products to satisfy the home demand of the State. That year, through the port of Santos alone, 497,000 liters of whiskey and 25,781,460 kilos of sugar were imported.

The municipalities where most attention is paid to the cultivation of cane are Tieté, Capivary. Piracicaba, São Pedro, Boa Vista das Pedras, Santa Isabel, S. Luiz do Parahytinga and Lorena.



There are, in the State of São Paulo, several factories for the manufacture of sugar and cane whiskey.

The data relating to the years of from 1901 to 1903 give the following yearly averages of production.

Sugar Production

| | · | | Yearly Ave | erage |
|---------------|---------|-------|------------|-------|
| Piracicaba Su | gar fac | etory | 3,371,140 | kilos |
| Villa Raffard | ,, | ;; | 2,058,100 | " |
| Porto Feliz | " | •• | 269,100 | ,, |
| Lorena Sugar | Mill. | | 575,700 | 11 |
| Monte Alegre | Sugar | Mill | 769,980 | ,, |
| Dumont | •• | ,, | 620,000 | ,, |
| Indaiá | •• | •• | 211,980 | ,, |
| Pimentel | •• | ,, | 420,000 | ,, |
| Barra | " | " | | " |
| | Total | | 8.296.000 | kilos |

Production of Cane Whiskey

| · | Yearly Av | erage |
|--------------------------|-----------|--------|
| Piracicaba Sugar Factory | 448,000 | liters |
| Villa Raffard " | 58,375 | " |
| Porto Feliz ", " | 17,957 | ٠., |
| Lorena Sugar Mill | 57,503 | ,,, |
| Monte Alegre Sugar Mill | | ,, |
| Dumont ", ", | 121,666 | ,, |
| Indiá ", " | 91,666 | " |
| Freitas Cane Mill | 28,000 | . 11 |
| Pimentel " " | | . ,, |
| Barra " " | 250,000 | · ,, |
| Total 1. | 073,167 | liters |

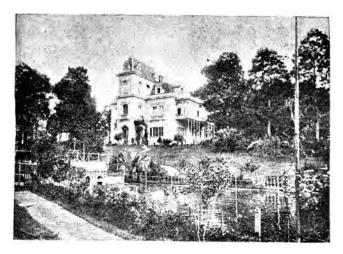
Cane ground

Piracicaba Sugar Factory 43,936,333 kilos
Villa Raifard ,, ,, 27,872,666 ,,
Porto Feliz ,, ,, 4,428,078 ,,
Lorena Sugar Mill . . 6,893,663 ,,
Monte Alegre Sugar Mill 8,796,545 ,,
Dumont ,, ,, 8,433,000 ,,
Freitas Cane Mill . . 6,700,000 ,,

There are also other important factories for the manufacture of rectified spirits from corn, or by re-distilling cane whiskey. This industry, at present in its beginning, promises much in the near future in the State of São Paulo. The consumption of alcohol may be greatly increased in many of the cities of the interior where the raw material is abundant, especially for illuminating purposes, both private and public.

Cotton culture was at one time in a very flourishing condition in the State of São Paulo. The period of the greatest prosperity for this industry was the ten years between 4867 and 1876, during which period, besides supplying the home demand, a yearly average of from 7 to 8 million kilos was exported. From that time on a decadence in cotton culture set in which has continued until the present time, when the production is not sufficient to supply the well-developed weaving industry of the State.

The statistics of the cotton production of 1900, covering only 22 municipalities of the State, show a production of 6,252,000 kilos of cotton. During the same year 1,486,265 kilos of cotton were imported through the port of Santos alone for local use.



Private Residence (Capital)

Lately cotton culture promises to take a new impetus. The crop of 1903 amounted to 6,750,000 kilos; that of 1904 is estimated at 9,750,000 kilos. Even this is not enough to furnish the demand of the very prosperous weaving industries of the State.

In 1903 the principal cotton weaving establishments were those in the table below:

| h. p. employes | of cotton (kilos) | of cloth (meters) | exbense |
|--|----------------------|--|--|
| | | | |
| 198 430 | 630,000 | 3,600,000 | \$229,320.00 |
| | 300,000 | 3,000,000 | . (|
| 240 350 | 480,000 | 1,000,000 | \$204,750.00 |
| _ | 165,000 | 720,000 | \$43,680.00 |
| | 240,000 | 1,500,000 | \$81,900.00 |
| | 000,009 | 3,500,000 | \$709,800.0 |
| _ | 225,000 | 1,600,000 | \$117,936.0 |
| | 200,000 | 1,400,000 | \$196,560.00 |
| | 300,000 | 820,000 | \$27,300.0 |
| | 1,000,000 | 5,400,000 | \$393,120.0 |
| | 300,000 | 1,350,000 | \$65,520.00 |
| | 20,000 | 1,400,000 | \$98,280.00 |
| | 720,000 | 4,800,000 | \$157,248.00 |
| | 200,000 | 1,000,000 | 1 |
| | 700,000 | 1,680,000 | \$45.864.00 |
| 300 | 1,050,000 | 1,500,000 | \$65.520.00 |
| 200 F | 7 160 000 | 000 026 78 | \$2,436,798,00 |
| 2550 2550 2550 2550 2550 2550 2550 2550 | | 16.0 18.0 18.0 10.0 10.0 14.0 14.0 14.0 14.0 14.0 14 | 160 240,000 300 240,000 186 225,000 186 225,000 190 300,000 140 300,000 260 200,000 260 200,000 260 200,000 300 720,000 300 700,000 300 700,000 |

The State of São Paulo was at that time third in the Union in this important industry, as may be seen below:

| | NO. (| F FACT | PRIES |
|--------------------------------|-------------------------------|----------------------------------|----------|
| FACTORIES | With spinning machinery | Without spinning machinery | TOTAL |
| Minas Geraes | 16 | 21 | 37 |
| Rio de Janeiro and the Capital | 18 | 11 | 29 |
| São Paulo | 11 | 7 | 18 |
| Maranhão | 8 | 8 | 16 |
| Bahia | 4 | 8 | 12 |
| Santa Catharina | 1 | 6 | 7 |
| Pernambuco | 4 | 1 | 5 |
| Ceará | 3 | 1 | 4 |
| Sergipe | 1 | 3 | 4 |
| Alagôas | 2 | 1 | 3 |
| Paraná | 2 | _ | 2 |
| Rio Grande do Sul | 1 | 1 | 2 |
| Espirito Santo | 1 | _ | 1 |
| Parahyba do Norte | 1 | | 1 |
| Piauhy | 1 | | 1 |
| Rio Grande do Norte | 1 | | 1 |
| Other States | | | |
| Total | 75 | . 68 | 143 |

Many other textile fibres grow in this State. One of them, Aramina, is now being cultivated on a large scale. There is, in the Capita factory which uses it in the manufactory ods for bags, carpeting, and twin uses Aramina rivals all kinds of her

The culture of the silk worm l with success, but these is yet no s the State to furnish a market for th



Reservoir of the State Capital wate

Grape growing is the newest agritry of the State. It has not yet reac openent that was expected, owing experiments being made with variwhich do not give good results.

The process of wine making in very rudimentary. There are, howev

makers who have the most modern apparatus, the most prominent among them being Dr. Nicolau Vergueiro of Sorocaba, a municipality near the State Capital, who has succeeded in producing excellent wine from the two American grapes "Black July" and "Norton Virginia".

In 1890, four thousand pipes of wine were produced in the State, one million eighty-nine thousand



Monument in Commemoration of the Independence of Brazil State Museum (Capital)

two hundred and twenty-three vines already bearing, and four hundred ninety-three thousand three hundred young vines. The wine produced that year amounted to one thousand two hundred and five pipes.

Thanks to the energy and tenacity of the learned Dr. Luiz Pereira Barretto, the problem of grape culture has been solved.

He has succeeded in breeding a vin farm near the State Capital, which is adapted to the climatic conditions of th São Paulo and which resists all the vine

Tobacco culture has been carried on ir for many years, but it has not increased. ture was first introduced in about 1777;



Normal School (Capital)

afterwards the crop was estimated at 300 more than half of which was exported.

In the ten years between 1877 and 1 supplying the local demand, the province along the coast, 3,725,370 rolls of twist: hundreds of segars: 3.542 thousands of and 164,056 kilos of snuff. The product year of 1886 was about two million kilo

At the present time the tobacco produced in the State is not sufficient for home consumption. In 1900, forty-five municipalities produced 9,479,415 kilos. In 1900 the State imported, through the port of Santos alone, 293,247 kilos of tobacco leaf; 23,722 kilos of cigarettes; and 42,189 kilos of segars.



Primeval forest

This will be one of the industries of the future, when the principal cause of its weakness, the want of laborers, is remedied. Experiments with the best varities of tobacco, São Felix, (of Bahia), Havana, Turkish, and Sumatra, have given most favorable results. At the present time, the districts where the tobacco culture predominates are the munici-

palities of Santa Branca, Parahybuna, and São José do Parahytinga.

The cerials, corn and beans, are grown all over the State of São Paulo. We may say that, during the last few years the production of these two cerials has been sufficient to supply the home demand, which was not true a few years ago when it was



Cattle at a drinking place

necessary to import large quantities from foreign countries. The statistics of the year of 1900 give the following production in ninty-one of the one hundred and seventy-two municipalities into which the State is divided:

Rice, which is consumed generally all over the State, is only cultivated on a very small scale; vast quantities of it are imported, chiefly from India. Nevertheless it grows very well in several districts of the State, and only the want of laborers can explain why it is not more generally cultivated.



Fishing for "Dourados" (gold fish) in the Mogy-Guassú River

Rice culture predeminates in the municipalities of Iguape, Xiririca, and Apiahy, but it is spreading over the western coffee districts especially those of Jahú, Santa Rita, and Ibipinga. It is without doubt one of the products for small farming in the future.

In 1900, in eighty municipalities, the production of 39,830,370 liters of rice was attained.

Commerce

ed considerable i
with the developeme
culture, the perfect

State has large commercial relations with the other States of the Union, and raily portation with the States of Minas Gerac and the Federal Capital, Rio de Janeiro.

The products of Goyaz and the southe Minas Geraes are exported through the Potos. During the year 1902 the exports State of Minas Geraes coming through Sa officially valued at \$8.821.481 and the exthe State of Goyaz throught at \$29.532.

The State has large commercial relations transportation with the Federal Capital States of Pernambuco, Alagoas, Bahia, Para Catharina and Rio Grande do Sul. The commerce with these States is principally importation. Among the goods imported the most important, from the several states, are: sugar and cotton from Pernambuco and Alagoas; lard, onions, tobacco, mandioca meal, soap, candles, and dried beef from Rio Grande



Panorama of the

do Sul, Santa Catharina and Paraná, and matches and candles from the Federal Capital.

The exportation from the State of São Paulo to the other states of Brazil is still very small, but promises to develope along certain lines, especially beer, hats and cotton goods.

The maritime commerce of the State of São Paulo

is carried on almost exclusively through the Port of Santos, the commerce through the ports of Ubatuba. São Sebastião, Iguape, and Cananea being still very limited. As soon as the projected construction of railways is realized it should at once increase considerably. The most important of these projected



ulo (State Capital)

railroads is the one which connects the Port of São Sebastião with the north of the State of São Paulo and the south of the state of Minas Geraes, that of Iguape with the capital of the State, and that of Cananea with the southern part of the State. These districts are as yet very sparcely populated but the land is very rich, well adapted to all kinds of culti-

vation, and awaits only the means of transportation and emigrant labor to become a source of great production. The laws of the State have made great concessions to these railway companies.

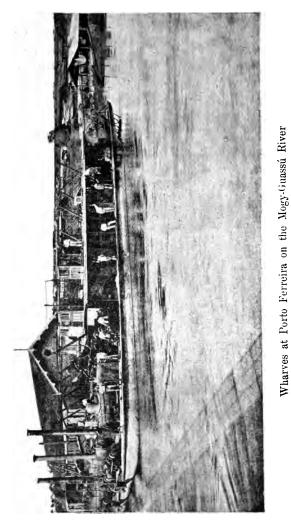
The maritime commerce with foreign countries is carried on exclusively through the Port of Santos.



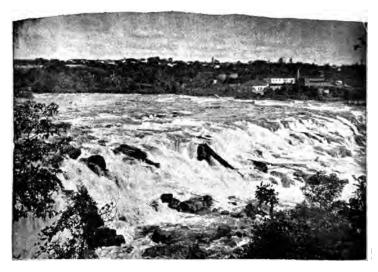
Cloth factory at Piracicaba

This port, one of the best in the world, has a magnificent system of docks built by the "Companhia de Docas de Santos" which allows the largest transatlantic liners to tie up and discharge their cargoes with the greatest ease.

During the year of 1902 the following number of vessels entered this port: 865 steamers represent-



ing a total of 1,382,929 tons and 91 sailing vessels, representing a total of 27,397 tons, or 956 vessels of all classes with a total of 1,410,326 tons. During the same year the following number of vessels left the Port: 873 steamers representing a total of 1,395,347 tons and 88 sailing vessels with a total



Fall on the Piracicaba River

of 25.785 tons, or 960 vessels of all classes aggregating 1.421 tons. The total movement of the Port of Santos was 1.917 steamers and sailing vessels, representing a tonnage of 2,831,458.

The movement of goods on the docks of the "Companhia" in 1902 was as follows:

IMPORTATION

| Direct, or from foreign | 1 |
|-------------------------|-------------|
| ports | . 477,579,2 |
| By coast trade, or fron | 1 |
| national ports | . 103,052,2 |
| Total importation . | . 580,631,4 |

EXPORTATION

Direct, or by coast trade 535,836,20

Total . . 1.116,467,6

The traffic of the different nationa port of Santos during the year of 1902 lows:

Goods loaded or unloaded

| National | itie | es | No. Vessels | Imports Tons | Exports Tons |
|----------|------|----|----------------|-----------------|-----------------|
| English | | | 218 | 297,127 | 172,57 |
| German | | | 122 | 87,134 | 229,75 |
| Brazilia | n | | 374 | 102,665 | 3,07 |
| Italian | | | 62 | 19,980 | 8,64 |
| French | | | 97 | 29,378 | 68,93 |

The foreign commerce of São Par reached a total of \$1,532,025; \$828,02 value of goods imported and \$704,0 of goods exported.

During the years 1886—1887 reached a total of \$49,454,683; \$40,

the value of exportation and \$8,908,380 the value of the goods imported.

During the year 1901 the direct importation of foreign goods through the Port of Santos was valued at \$46,362,959: the value of goods exported



Lot in a colonist reservation

was \$187,462.613. The movement of foreign commerce for the State of São Paulo was valued at \$233,825,572.

A part of the products of São Paulo, made up almost entirely of coffee is exported by land to the port of Rio de Janeiro. These goods, which are furnished almost entirely by the northern counties, : are carried by the Central Railroad, which connects the City of São Paulo with the Federal Capital.

Of the foreign goods imported into the State of São Paulo, the most important are rice, flour, potatoes, wheat, cotton. — both in the raw state and in piece. — iron and steel, — both in the rough and as instruments and impliments, — machines,



Great Falls on the Paranapanema river

tools, coal, cement, silk, — principally made up and in piece, — linen, — made up, though principally jute and hemp prepared for use, — chemical products, pharmaceutical compounds, drugs, material for the manufacture of perfumery, inks, paints, oils, lard, butter, preserves, cod-fish, and jerked beef.

The food stuffs imported from the different countries are as follows: dried beef and wheat from

Buenos Ayres, cod-fish from the north of Europe, rice principally from Rangoon, flour and lard from the United States, wines from Portugal, Spain, France and Italy, butter from France and Germany and hams from Italy and Portugal.

The other imports are principally from England,



Avenue de Eucalipti Polyanthemi

the United States, Germany, France, Italy and Portugal.

The State of São Paulo occupies first place in the value of her exports, which amount to about $40 \, ^{\circ}/_{\circ}$ of the total imports of the Union. In imports she ranks next to Rio de Janeiro, her exports

amounting to $25.5 \, {}^{\circ}/_{\circ}$ of the total imports of the country.

INDUSTRY

The mining industry is limited to the extraction of some shists, building stone, lime stone for the manufacture of lime, clay for the manufacture of ceramic products, and marble, of which many beautiful varieties are found in several parts of the State.

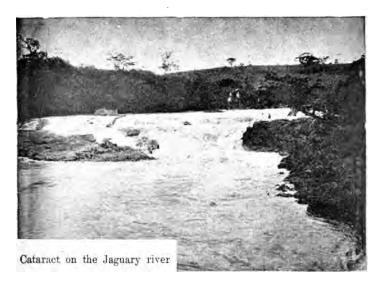
Gold has been mined in several places and these mines, though still rich enough in ore to justify their being worked on a large scale, have been abandoned for many years. The surface deposits of colonial days are almost entirely exhausted, but with the use of adequate machinery there is no doubt that



paying veins of ore would be found in many of these old works.

In one of them, at Apiahy, a new company has just been inagurated which is extracting an average of 15 grams to the ton of ore.

As to silver: there are reports that beds of ga-

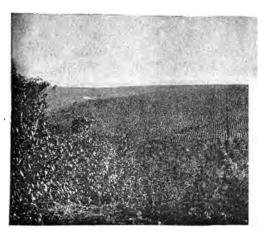


lens and lead sulphate containing a small per cent. of silver have been discovered in the municipality of Iporanga.

Iron ore has been discovered in many of the municipalities and there is at Ipanema an iron foundry of large dimensions established by the government, which is at present closed.

Near the Serra Jaragua, in the muni the capital near the Serra Parnahyba, of manganese have been discovered.

Several rivers and small creeks in the palities of Franca and S. João Baptista do are said to be rich in diamonds. At one mond mining was carried on to a certain



A sea of coffee trees

the first of these municipalities, but it has most entirely abandoned.

There are reports of the discovery of in several other sections of the states, probability they may be found in all of cipalities.

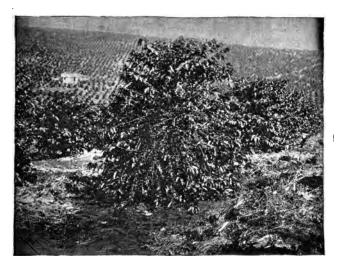
Small beds of coal have been discover

eral places in the State, principally in the municipalities of Tatuhy, Tieté and the neighboring dis-



tricts. The thickest bed is situated in the first of these municipalities, at a place called Agua Branca.

It is, however, only about half a meter in thickness and therefore too thin to be worked. The existence of these beds leads us to believe that by means of the necessary soundings, beds of sufficient extent and thickness to be profitably worked must exist, though scattered over a considerable area.



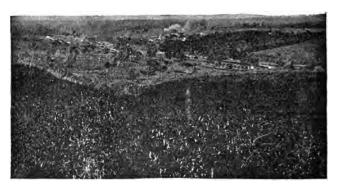
Three-year-old coffee tree with berries

In the valley of the Parnahyba River in the municipality of Taubaté and of the Tieté near the port called Martins, in the municipality of Rio Bonito, are found large beds of bituminous shists, and grey stone heavily charged with bitumen. In the first of these municipalities the bituminous shists have been worked, and still are used for the manu-

facture of illuminating gas, kerosene, lubricating oils and paraffine.

Phosphate of lime, adapted to the manufacture of mineral fertilizer, is found in large beds on Mount Ipanema.

There are in the State four cities illuminated by gas, the Capital, Santos, Campinas and Taubaté. The most important factory is that of the Capital



Bird's-eye view of a coffee plantation

belonging to The São Paulo Gas Company, Limited.

This factory produced in 1902 5,283,657 cubic meters of illuminating gas.

The total number of combusters in the streets and squares of the city is 3,927. The cubic meters of gas used in private residences for illuminating purposes amounted to 2,273,062 cubic meters; 240,849 cubic meters were used for other purposes.

There is in the state an important factory for

the manufacture of burlap, capable 20,000,000 meters per year, and whemploys 800 laborers.



Coffee drying ground

Thee beer industry is scattered of State, a large number of breweries be in the small towns of the interior.



Young coffee

these breweries is of an interior quality and fit only for local consumption of the lower classes.

In the State Capital there-are, however, two very important breweries, the Antarctica and the Bavaria, both equipped with the most modern machinery and yielding an excellent product which has been very favorably compared with the imported article,

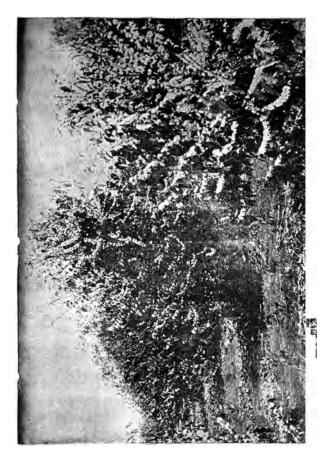


Gathering coffee

and is gaining steadily in the markets of the other states of the Republic. The Antarctica employs 300 laborers and produced last year 3,000,000 liters of beer, which was sold in São Paulo, the Federal Capital, the State of Rio de Janeiro and in the northern states as far as Amazonas.

The output of the Bavaria in 1899 reached 40,000 hectoliters, nine-tenths of which was consum-

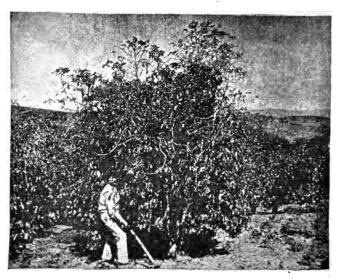
ed in the State of São Paulo, the remainder bei



exported to the northern states. This brewery ε ploys about 200 persons.

Among the hat factories. — another industry which has attained some importance, — the most important are as follows:

Pereira, Villela & Co. of Sorocaba, which produces felt and linen hats, and make about 900 daily. They employ about 100 persons, and expox; their

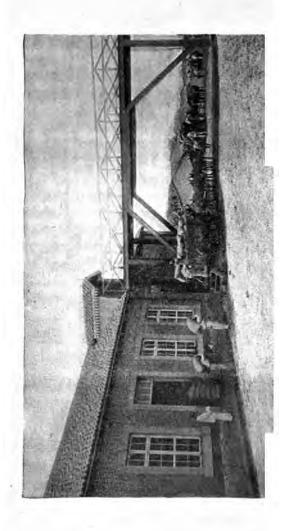


A coffee tree one hundred years old

products to Minas, Goyaz, Paraná, Santa Catharina, Rio Grande do Sul and the northern states.

The factory of Monzini, Schiffini & Co. in the capital produces 2,000 hare and linen hats daily, and employs 200 persons.

The Hempel Hat Factory in Campinas is equip-



ped with all the modern appliances and has a large annual production.

The Weltmann & Christy hat factory, in the Capital, manufactures annually 100,000 hats of all grades and employs regularly 80 persons.

The Deodato Leme hat factory, in the Capital, manufactures linen and all grades of felt hats, and employs regulary 99 persons.

The manufacture of pastes for food stuffs has



· City and Harbor Santos

developed greatly in the State; Italian factories of macaroni and soup stock are to be seen everywhere.

Other factories of different kinds exist in the State as, for example, silk factories (on a very small scale), carpet factories, furniture factories, — in which the finest furniture is made; there are a great number of these factories, — also some glass factories and glass grinding establishments; toy factories, shoe factories, factories for the manufacture of

musical instruments and planes, eine and turies, tanneries, sugar refineries, cando



and mineral water factories, factories of and pharmaceutical products, iron and bron

dries, factories of antiseptics, oils, flour mills, carpet slipper factories, distilleries, factories of agricultural machinery, cement, carriages, gun powder, matches, ready-made clothing, books and paper, ceramica and lime kilns.

The railroad shops of the Companhia Paulista,



The Docks at the port of Santos

at Jundiahy. and of the Mogyana at Campinas are worthy of mention. They are both equipped with the most modern machinery and adequate not only for repairing locomotives and rolling stock of the company, but for the manufacture of both passenger coaches and freight cars.

The Compania Mechanica and Aren and Lidgerwood are noted for the man machinery, especially for cleaning cof other agricultural instruments and impl

ELECTRICITY

São Paulo has already several large



Loading Coffee at Santos

of this important branch of industry an ceptionally good field for future develop

Excluding the capital, where both elegas are used, there are 16 cities in the 5 by electricity. The power of the motors 800 to 80 h. p. In some of the cities for instance, the lighting plants also fur to factories and shops.

The most important of the hydro-electric installations is at Parnahyba, 33 kilometers from the Capital. This installation is considered the largest in



South America and one of the most notable in the world. It furnishes light, street car traction and motor power to the capital.

This plant belongs to the São Pau Light and Power Co., Ltd., which was with a capital of \$12,000,000, chiefly by and Americans. The capacity is 8,000 may be easily doubled.

The larger part of the electric curr sumed in street-car traction. The lines



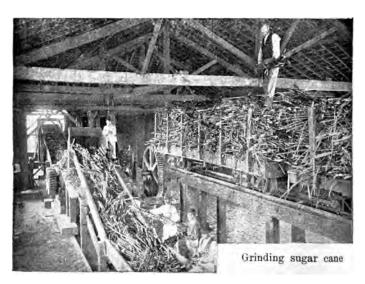
Sugar mill in the city of Piracicaba

tend over the whole City and its suberl mainder is used for motor power in tl and shops and for illuminating.

In 1902 the current was distributed

| Traction | | 1000 | kilow |
|--------------|--|------|-------|
| Motive power | | 900 | " |
| Lighting | | 800 | •• |

The street car line is 90 kilometers long, with a gage of 1435 milimeters, inclines of $11 \, ^{\circ}/_{\circ}$ and curves with a minimum radius of 16 meters. The cars have a seating capacity of 45, weight of 10 tons and each one is furnished with two motors (G. E. — 58). The force used by a single car is



29 h.p.; on inclines of $11^{\circ}/_{0}$ the velocity is 14 kilometers per hour; on a level it reaches 32 kilometers.

There is even greater power in other rivers of the State awaiting utilization. The Tieté River between the Capital and the Ytú falls, according to estimates, has 150 meters of hydraulic falls which could furnish nearly 75,000 h. p. steam. From this point down the stream there are also the falls: Barra Grande, Escaramuça, Avanha the rapids which precede the great falls six kilometers from the imposing falls of formed by the Rio Grande.

The volume of the waters of the ri and Rio Grande, passing over two falls, I



Transporting sugar cane

Urupunga, are estimated at over six m hundred thousand liters per second, — equal to the great Niagara. The avera the two rivers being calculated at 13: power to be obtained from these two fall ceeds one million horse power, steam, ar fore four times the power to day used in

in all its mercantile and industrial establishments, railway and river navigation.

The Paranapanema River, which has a flow of about 300 cubic meters per second at its mouth, is only navigatable in sections, which are separated from each other by long stretches of obstructed and impassable water. Its numerous falls and rapids render it rather a great natural reservoir of hydrau-



lic force than an artery for internal commerce. The principal falls are: — the Itapucu, which has a height of 2 m 178 milimeters and a width of 123 meters; the Aranhas and the Piraju where, in a distance of 19 kilometers, the river falls 34 meters; the Agua do Padre with a fall of four meters; the series of Palmital, with a height of eleven meters. The Salto Grande or Dourados, about six kilometers below the bar of the Rio Pardo, — the largest tri-

butary on the right side, — has a fal ters. All of these falls, together with ble host of rapids and cataracts on th of the State, guarantee an inexhausta hydro-electric power for the future in State of São Paulo.



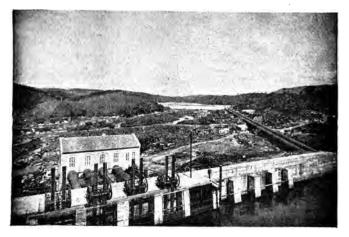
Corn field

RAILROADS

The State of São Paulo had in 3,546 kilometers of railroads.

The Estrada de Ferro Central of E Railroad of Brazil) connects the City neiro with the Capital of the State of The total length of this road is 496 ki of which are in the State of São Pau The port of Santos is connected with the Capital by 79 kilometers of railroad belonging to the São Paulo Railway, which runs 60 kilometers beyond the Capital to the city of Jundiahy.

The Estrada de Ferro União Sorocabana & Ytuana has within the state 905 kilometers of road in use. This road has for its initial points, on one side

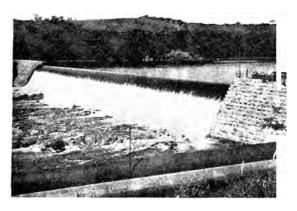


Hydro-electric installation of the Light and Power Co. at Parnahyba in the State of São Paulo

the City of São Paulo, the State Capital and on the other the City of Jundiahy where the São Paulo Railway terminates. This railroad also serves a zone of great commercial and industrial importance. The most important centers of this zone are: — São Manoel do Paraiso, 345 kilometers from the Capital (a journey of 12 hours); Avaré, 387 kilometers (about

13 hours); Piracicaba, 194 kilometers (10 and Sorocaba, 111 kilometers (three and a hal from the Capital.

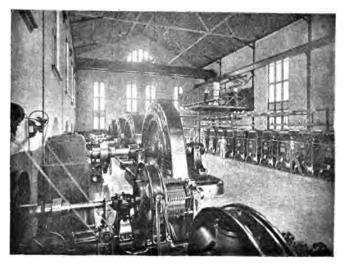
The two largest companies, the Paulista Mogyana, cover with a network of roads the productive and the most densely populated the State where the great coffee plantations a



Hydro-electric installation of the Light and Power Co. at Pa in the State of São Paulo

first of these companies has 916 kilometers all in the State, and the second 923 kilom this State and 283 in the State of Minas, of the extention which will in time reach the Goyaz, — besides 17 kilometers which Poços de Caldas, a health resort of Minas

The Paulista Railway begins in Jundi the terminus of the São Paulo Railway, and through Campinas, the county seat of one of the most important coffee producing counties, about 105 kilometers from the State Capital. Of the agricultural centres connected by this railway the most important are Jaboticabal, 419 kilometers (about 13 hours journeay) from the Capital; Araraquara, 323

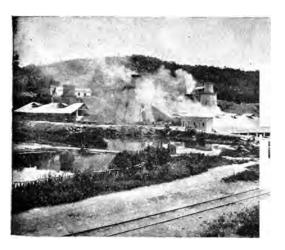


Hydro-electric installation of the Light and Power Co. at Parnahyba in the State of São Paulo

kilometers, (about 10 hours) from the Capital; and Rio Claro, 195 kilometers (slightly more than 5 hours) from the Capital.

The Mogyana begins in Campinas, where the Paulista passes, and the trunk line crosses the greater part of the State, towards Minas and Goyaz, ter-

minating at Jaguara, the last station in th of São Paulo, 616 kilometers from the journey of 22 hours. This road serves I important agricultural centre, 528 kilomet $16^{-1}/_{2}$ hours) from the Capital; Mococa, hours from the Capital); Ribeirão Preto. meters (14 hours) from the Capital.



Lime kiln and paper factory

These are the principal railway system State; there are others of less importance, sto them.

The following tables, representing the movements of the four principal railroad the year 1902, give a good idea of the of these roads.

| | Total receipts dollars | Expenses dollars | Profit dollars |
|-----------------------|---------------------------|---------------------|-------------------|
| São Paulo Railway | 13,149.205 | 6,310,109 | 6,839,097 |
| Paulista Railway | 13,601,567 | 6,076,294 | 7,525,273 |
| Mogyana Railway | 9,554,068 | 4,932,649 | 4,621,419 |
| Sorocabana & Ytuana . | 5,571,533 | 2,934,068 | 2,637,455 |



Palm trees

The statistics of traffic during 1901 give the following returns.

| | | | | Pass | engers transport |
|--------------------|---|-----|-----|------|------------------|
| São Paulo Railway | | | | | 1,551,612 |
| Paulista Railway . | | | | | 1,180,074 |
| Mogyana Railway. | | | | | 1,098,792 |
| Sorocabana & Ytuan | a | Rai | lwa | av | 609,495 |

| | Bagage and express pa São Paulo Railway | rcells | kilos 14,622,433 1,1986,000 8,257,908 5,509,188 |
|---|--|---------|---|
| | Freight | tons | tons |
| | São Paulo Railway | | |
| | Coffee | 583,408 | |
| | Cotton | 2,236 | |
| | Sugar | 34,076 | |
| | Salt | 33,427 | |
| - | Various other goods | 839,499 | 1,492,646 |
| • | Paulista Railway | | |
| | Coffee | 682,668 | |
| | Various | 456,152 | 1,138,820 |
| | Mogyana Railway | | _ |
| • | Coffee | 249,545 | |
| | Cotton | 644 | |
| | Sugar | 12,027 | |
| | Cereals | 62,156 | |
| | Tobacco | 343 | |
| | Salt | 16,822 | |
| | Cane whisky | 4,775 | |
| | Various other goods | 76,321 | 422,633 |
| | Sorocabana & Ytuana Ra | ilway | |
| | Coffee | 71,787 | |
| | Cotton | 711 | |
| | Sugar | 4,039 | |
| | Tobacco | 187 | |
| | Salt | 1,696 | |
| | Various others | 183,893 | 262,313 |



Laborers houses on a plantation



Cataract on the Mogy-Guassú River

RIVER NAVIGATION

There are several navigable rivers in the State of São Paulo but as they are almost all in the plateau which covers almost the whole State, they are not adapted to large river navigation, the topography of



/ Grape vines

the district causing the rivers to flow in a direction contrary to that sought by commerce. This is the reason why there are comparatively few regular lines of river navigation. At the end of 1902, there were in the State 576 kilometers of river navigation. The Xiririca and Iguape Line on the Ribeira River, 154 kilometers long, is the only line estab-

lished on a river which flows directly into the ocean. As it serves a sparsely settled region, however, its traffic is very small.

The other river lines, which are only used to facilitate the transportation of agricultural products



Jequitibá tree

to the railways, which carry them to Santos, are:

— the Mogy-Guassu River, from Porto Ferreira to
Pontal, — a distance of about 200 kilometers; the
Piracicaba River, from João Alfredo to the mouth
of the river, — a distance of about 126 kilometers:

the Tieté river, from Porto Martins to Porto R
— a distance of about 96 kilometers.

COAST NAVIGATION

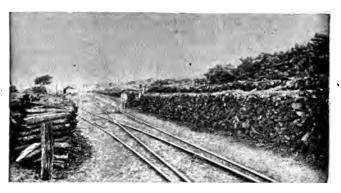
The coast navigation, that is, the maritime munication between the national ports is, in



Apfle trees

dance with the constitution of Brazil, carriexclusively by ships carrying the Brazilian fl

All of the national lines touch at the p Santos. The most important of these lines Loyd Brazileiro, which starts from the port of de Janeiro and touches at the principal ports States of Paraná, Santa Catharina and Rio Grande do Sul.



Fire wood



A city in the interior of the State

The State government subsidises a navigation company which runs between Rio de Janeiro and Santos, touching at the northern ports of the State.

TRANSATLANTIC NAVIGATION

There are many navigation companies that have regular lines of steamers between Europe and the port of Santos. The principal lines are: the Hamburg-Südamerikanische Dampfschifffahrts-Gesellschaft, which has on this line some of its largest steamers, among which are the following:

| Steamers | Tons | Steamers | | Tons |
|----------------|-------|---------------------|--|-----------|
| Antonina | 3,992 | Paraguassú | | $2,\!541$ |
| Argentina | 3,791 | Paranaguá. | | 2,803 |
| Bahia | 4,763 | Pelotas | | 3,944 |
| Buenos Ayres . | 3,184 | Pernambu c o | | 4,788 |
| Cap-Frio | 5,648 | Petropolis . | | 4,792 |
| Cordoba | 4,871 | Rio | | 3,187 |
| Corrientes | 3,720 | Santos | | 4,855 |
| Desterro | 2,543 | São Paulo. | | 4,724 |
| Itaparica | 2,543 | Tijuca | | 4,801 |
| Maceió | 2,786 | Tucuman . | | 4,661 |



Manioc plantation

The average run between Hamburg and Santos is 21 days. The steamers touch at Lisbon, Bahia, and Rio de Janeiro.

The Norddeutscher Lloyd, of Bremen leaves that port every 14 days.

The following steamers of this company touch at the port of Santos.



Pear trees

| Steame | ers | | Tons | Steamers | | Tons) |
|----------|-----|--|-------|-------------|----|-------|
| Mainz . | | | 3,204 | Stolberg . | ٠. | 2,480 |
| Coblenz. | | | 3,169 | Heidelberg. | | 3,372 |
| Trier, . | | | 3,168 | Roland | | 3,603 |

The average run from Bremen to Santos takes 30 days. The steamers touch at Anthwerp, Oporto,

Lisbon, Madeira, Pernambuco, Bahia and Rio de Janeiro.



Banana trees



Field of rye and barley

The "Chargeurs Réunis", on their Brazilian branch, make three voyages per month from Havre

to Santos. The steamers which this line sends most frequently are:

| Steamers | | Tons | Steamers | | Tons |
|-------------|---|-----------|-------------|--|-------|
| Cordoba . | | 3,380 | Colombia . | | 3,425 |
| Entre-Rios. | | 3,380 | Canarias . | | 4,110 |
| Santa Fé. | | 3,380 | Caravellas. | | 4,110 |
| Concordia . | • | 3,425 | Parahyba | | 3,900 |
| Colonia | | 3,425 | Paranaguá. | | 3,180 |
| Campana . | | | San Nicolas | | 2,530 |
| Corrientes. | | $3,\!425$ | Carolina . | | 3,850 |
| Coruca | | $3,\!425$ | | | |



Vineyard

The voyage from Havre to Santos takes 25 days. The steamers touch at Leixões, Lisbon, Pernambuco, Bahia and Rio de Janeiro.

The "Transports Maritimes" sends the following ten steamers.

| Steamers | | Ton s | Steamers | • | Tons |
|-------------|--|--------------|------------|---|-------|
| France | | 4,223 | Italie | | 4,180 |
| Espagne . | | 4,144 | Provence . | | 4,076 |
| Aquitaine . | | 3,399 | Les Alpes. | | 4,164 |
| Les Andes. | | 4,164 | Savoie | | 2,016 |
| Alsace | | 2,016 | Bretagne . | | 2,209 |

These steamers make two trips per month regu-



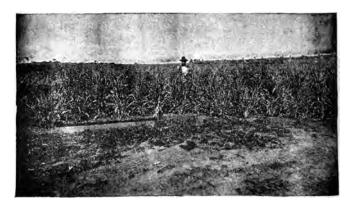
Trunk of a Jequitebá tree

lary from Europe to Santos, leaving Naples, and touching at Genoa, Marseilles, Barcellona, Malaga, Gibraltar, Dakar and Rio de Janeiro. The voyage from the port of departure to Santos takes 25 days.

The three Italian companies, "La Veloce", "Navegazione General" and "Ligure Braziliana", have regular lines running from Italy to Santos direct.

The "La Veloce" has in regular service the following steamers.

| Steamers | Tons | Steamers | Tons |
|------------------|-------|-------------------|-------|
| Savoia | 4,377 | Cittá di Milano. | 3,410 |
| Nord America . | 4,826 | Cittá di Torino . | 3,410 |
| Duch.ª di Genova | 4,304 | Cittá di Genova. | 3,918 |
| Duca di Galliera | 4,304 | Piemonte | 2,317 |
| Centro America. | 3,474 | Etruria | 2,223 |
| Venezuela | 3,474 | Las Palmas | 1,862 |



Rice field

These steamers leave Genoa, and touch at Naples, Teneriffe or Las Palmas, making the voyage in about 16 days for the swiftest steamers and about 21 days for the slowest.

The regular steamers of the "Navigazione Generale" are:

| Tons | Steamers |
|-----------|---|
| 1,933 | Marco Minghett |
| 2,296 | Domen.º Balduin |
| 2,291 | Montebello |
| $2,\!274$ | Rubattino |
| 1,845 | Sempione |
| $2,\!582$ | Vicenzo Florio |
| | 1,933 2,296 2,291 2,274 1,845 |



Corn

The regular steamers of the "Ligure Bı are:

| Steamers | | Tons | Steamers | |
|----------|-----------|-------|-----------|--|
| Ré | Umberto . | 2,195 | Colombo . | |
| Rio | Amazonas | 2,228 | Minas | |

The ports and time of the voyages at the same as those of the "La Veloce". The

of monthly voyages of these three companies is of two or three, according to the demands.

TELEGRAPHS

The telegraphic service of the State is rendered by the National Telegraph Department of the Federal Government.



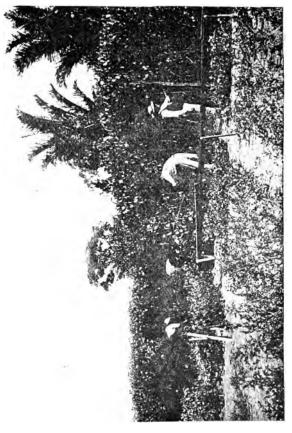
Harvesting hay

The telegraphic stations of the State are, the State Capital, the ports of Santos, Iguape, São Sebastião, and Ubatuba; the interior cities of Batataes, Campinas, Casa Branca, Franca, Jundiahy, Mogy-Mirim, Ribeirão Preto, and São Simão.

From these stations telegrams can be sent to any of the other states of Brazil or to any of the foreign countries served by the submarine telegraph-cable.

١

The telegraphic service of the State is not limited to the National Telegraph. There is also a local com-



pany supported by the State Government, connecting at Itararé with the state of Paraná. The telegraphic

The Aramina Harvest



communications are open to the public at any of the railway stations in the State.

POST OFFICE DEPARTMENT

The Postal Service in charge of the Federal Government in São Paulo is thoroughly organised and very efficient, as its progress shows.



Cotton

There are in the State 413 post offices besides the Central Office and Administrative Department in the Capital: of these 12 are first class, 23 second class, 77 third class and 301 fourth class.

Receipts and expenses. The total receipts for the year of 1903 were \$1,228,731.83. The total expenses were \$820,292.48, leaving a balance of \$408,439.35.

Money Orders. — During the same year the movement in the Money Order Department was as follows:

National money orders emitted 38,972 with a total value of \$1,596,107.33.

paid 36,515 with a total value of \$1,685,974.88.

Foreign money orders emitted 939 with a total value of \$10,870.60.

paid 150 with a total value of **\$4**,796.26.

The following statistics relating to the mails received and sent through the Central Office in the Capital, during the years of 1901, 1902, and 1903 show the steady increase of mails handled from year to year by the São Paulo Post Office Department.

| | | | 1 | 901 | | | | | | |
|--------------|------|----------|-----|---------|----|----------------------|-------------|--|--|--|
| Unregistered | mail | (letters | and | parcels | | | | | | |
| Registered | 11 | " | • | •• | | | 81,645,268 | | | |
| Registered | ** | 11 | " | ** | | | 543,348 | | | |
| 11 | 17 | " | •• | ••• | | distributed. | 301,336 | | | |
| | | | | Total f | or | 1901 | 103,915,164 | | | |
| 1902 | | | | | | | | | | |
| Unregistered | mail | (letters | and | parcels | s) | received . | 23,105,832 | | | |
| " | " | " | 11 | - ,, | | | 85,492,112 | | | |
| Registered | " | " | " | •• | | | 546,969 | | | |
| " | 17 | 11 | " | ,, | | distributed <u>.</u> | 460,571 | | | |
| | | | | Total f | or | 1902 | 109,605,484 | | | |
| | | | 1 | 903 | | | | | | |
| Unregistered | mail | (letters | and | parcel | | | | | | |
| | " | " | " | 17 | | distributed. | | | | |
| Registered | " | " | 17 | " | | received . | | | | |
| " | " | 17 | " | •• | | distributed. | 474,960 | | | |
| | | | | Total f | or | 1903 | 114,663,991 | | | |

